

The Wisconsin horticulturist. Vol. VI, No. 4 June 1901

Wisconsin State Horticultural Society [s.l.]: [s.n.], June 1901

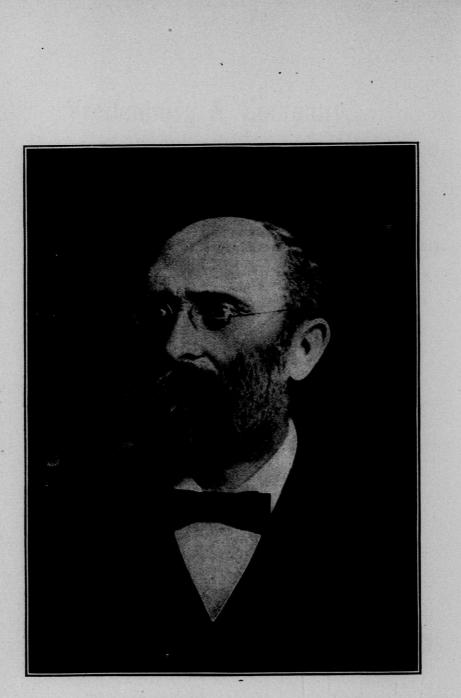
https://digital.library.wisc.edu/1711.dl/LK2CZCWR3LLUK8T

Based on date of publication, this material is presumed to be in the public domain.

For information on re-use, see http://digital.library.wisc.edu/1711.dl/Copyright

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.



THE LATE PROF. OTTO LUGGER, MINNESOTA STATE ENTOMOLOGIST. Courtesy of The Farmer, St. Paul, Minn.

The Wisconsin Borticulturist.

VOL. VI.

JUNE.

NO. 4

DEATH OF A GREAT ENTOMOLOGIST, PROF. OTTO LUGGER.

It is with profound sorrow that we have to announce the sudden death, May 21, of Professor Otto Lugger, entomologist of the Minnesota Agricultural Experiment Station and one of the most famous entomologists of America. He had been ill with pneumonia only a few days, and although the disease had been considered serious at first, for two days prior to his death he was believed to be quite out of danger. His physician, Dr. Cannon, had just entered his room on his morning rounds, and the patient greeted him with the statement that he had passed an uncomfortable night. Even as he spoke the words death came without a moment's warning.

His sickness had been contracted from a cold drive from Faribault. He leaves a wife and one son, Humboldt Lugger, now in Kentucky, and a married daughter, Mrs. Linnea Clarke.

Dr. Lugger was considered one of the most eminent entomologists in the world. He was an especial authority on Northwestern insects, birds and animals, and his work of a practical nature in determining what birds and insects were beneficial and what injurious to farmers' crops are of incalculable value to the agriculture of the region. His work in

6

inoculating chinch bugs, his invention of the hopper dozer for destroying grasshopper pests and his bulletins on the Rocky Mountain locusts have been worth hundreds of thousands of dollars to our agriculture. His book, "An Illustrated and Classified Report of Insects Relative to the Agriculture of the State," ought to be in the library of every Northwestern farmer, certainly no Minnesota farmer can afford to be without its aid.

Dr. Lugger's scientific works have been translated into many languages. His writing never had the dry heaviness of a mere scientist, but even his bulletins on bugs abounded in his quaint humor which made his personality so enjoyable. He was never without a keen sense of humor and his company was most delightful to his many friends.

He was of German birth, born September 15, 1844, at Hagen, Germany. His father was a professor of chemistry in a Prussian university. He was educated in Hagen and in 1864 became a lieutenant of cavalry in the German army. In 1865 he came with his parents to the United States and became attached as engineer in the surveying service of the Government, engaged in surveying the Great Lakes, spending two years at that work. In 1868 he was elected as assistant state entomologist of Missouri, serving until 1875. Then he became curator of the Maryland Academy of Science, at the same time acting as naturalist of the city parks at Baltimore. Three years he spent in the department of. agriculture at Washington. He was appointed to the professorship of entomology at the Minnesota Experiment Station of the Agricultural School, afterward becoming professor of botany. By an act of the state legislature the office of state entomologist was created and had been held by him since its creation.

His loss will prove a most serious one to the Minnesota Experiment Station and to the Northwest.—Northwestern Agriculturist.

7

OTAHEITE ORANGE.

A contributor to Vick's Magazine gives her experience with the Otaheite Orange:

"I procured a plant and did everything to it that people said should be done, and the result was a failure. Then I bought another, a nice, thrifty looking plant, and I concluded to try just ordinary treatment with it. I sprinkled some lukewarm water over its leaves, and put the roots, without removing the moss in which they were wrapped, into tepid water over night. Into a six-inch pot I put some bits of crocks and some rich, sandy loam, and set the plant a little deeper in the pot than it had been, pressed the soil firmly around the roots, watered and kept it in a cool, rather dark, situation for a few days. I then put it in a south window where large plants shaded it, and as soon as growth commenced it was given the full benefit of the sun, and how splendidly that little plant did bloom, every eye sending out a cluster of flowers; it set eighteen oranges. All of them were removed but one, which is at present as large as a hickory nut. It proves a real curiosity to the children, and to raise orange blossoms at home is a luxury not to be despised. A friend remarked, on being told that my orange was less than a year old, that she had an orange that was three years old that did not show any signs of blooming."

PETUNIAS.

I once knew an old bachelor who lived in a house by himself on a western prairie. A stray flower catalogue fell into his hands, and in it he found a colored picture of that brilliant carmine petunia, Countess of Ellesmere, so much used for bedding. It struck his fancy and he sent for three papers of the seed. Next he made a big, round flower bed, at least ten feet in diameter, and sowed the entire bed to the petunia seed. The ground was mellow, the soil was

8

rich, and the little seedlings soon grew into long-armed, thickly matted plants. When they bloomed the purplish hue of the flowers could be seen a mile away, and when face to face with the bed it was seen to be a solid circle of glowing, radiant, velvety bloom. As he complacently and slangily remarked: "His bed knocked the socks off from any other flowers on the prairie."

I give this as an example of what a striking effect can be obtained at little cost or trouble by the use of this good old annual, of which it may truthfully be said that it is one of the half dozen best plants in existence for garden decoration.

Dust and insects, drought or rain, have no terror for it. Soon the buds come, and then the flowers, dozens, scores of them, and that constantly, from early summer until after hard frosts.

There is not a prettier or more showy bedding plant than these, for the very good reason that there couldn't be. And where will they not grow, if the chance is given them? Over rock-work, scattered among shrubbery, and through mixed borders, or massed in beds by themselves, they are alike thrifty and handsome. Without exception, so far as my experience goes, the petunia is the least affected by seed bearing of any annual. With myriads of green and ripe seed pods all over the plants, the petunia bed is as gay with bloom in early October as it was in June or July. Give them plenty to eat—that means a rich and mellow bed and they will grow, and if they grow, they are certain to bloom. —Vick's Magazine.

Mrs. Hiram Offen: "Dinah, I hope you didn't forget to wash the fish before you put it in to bake?" New Servant: "Mah Lan'! Whut fur Ah gwine wash a fish dats a-libin' in de watah all hits life?"—Catholic Standard and Times.

.

9

A WORD TO FARMERS' WIVES.

The lawyer and the teacher, the doctor and the preacher, the butcher, the baker and the candlestick-maker, nearly everybody but the farmer and his wife, will shortly be off on a vacation. Here and there a farmer has reluctantly turned his work over to the hired man for a few days and taken an outing, but as a class they plod on in the old ruts three hundred and sixty-five days in the year.

How is it with the farmer's wife? She cannot relegate her work to the hired girl for even a few days, for she rarely has one. She has staid at home so long, it is almost universally supposed that there she must stay. To go camping for a week or two would be an unheard of innovation.

Some very wise people, ever ready with suggestions regarding other people's business, advise that she buy bakers' goods and canned meats, serve cold meals for a few days, and rest and recuperate in the hammock. A hammock is a very good place in which to spend a leisure hour; but the imperative need of the farmer's wife is not leisure, but CHANGE. So long as she remains at home, its cares and labors will not be laid aside. The body may for a time take the attitude of repose; with nothing to divert, the thoughts will invariably run in the accustomed channels, and the hands and feet will soon follow.

A day spent entirely away from home brings more in the way of rest and recuperation than several days of comparative leisure amid customary surroundings. When we go for a few hours' ride, see other people's homes, catch a glimpse of new faces, life takes on a new interest; we return to our daily tasks with an added zest. It is a positive luxury, trivial as it may appear, to the woman who week in and week out has been cooking, canning, pickling, preserving, to go from home and eat something some one else has prepared; to lie cosily in bed of a morning hearkening to

the rattle of kettle and saucepan; scenting the aroma of coffee and breakfast odors which are wafted to the senses while dreamily and expectantly awaiting the summons to the morning meal some one else's hands have made ready. Neither mind nor body will long retain elasticity and vigor without an occasional change of environment. "Iron sharpeneth iron, so a man sharpeneth the countenance of his friend." New faces, new scenes, contact with new people, give new impetus and interest.

With careful planning, the work of the house can be made comparatively light for a week or two. In nearly every neighborhood some one can be found to take it for a few days at least; if not, buy a supply of bread, cookies, canned meat and vegetables as recommended; feed the milk to the calves and pigs, and instead of scurrying out to the hammock, if by hook or crook an hour's leisure is secured, let us up and away, and leave dull care behind. Possibly pater familias will open wide his eyes in astonishment. But never mind, when we get back he can take his turn; the gain will more than compensate for temporary inconvenience and slight financial loss.—Country Gentleman.

BLUEBERRIES-VARIETIES AND THE SOIL THEY REQUIRE.

By Wesley Johnson, Kent County, Michigan.

In a recent number of the Horticulturist is a short article on the cultivation of blueberries. I have been interested in blueberries or huckleberries for a number of years and can perhaps add a little information. There are a great many varieties growing naturally in this vicinity, the local names being blueberries, huckleberries and crackleberries.

Blueberries grow on small low bushes, seldom over a foot in height. They adapt themselves to a variety of soil and are found on deep peat bogs and the clay loam of a ket-

tle range and all the variations of soil between. The berries are usually dark blue covered with a light bloom. Some varieties however are black. The berry usually ripens the latter part of June or early in July and will hang on the bushes for a month or more, if allowed to do so. The quality is good but the berries are quite small.

Huckleberries flourish best in peat bogs but are often found on high ground. For many years past a bush has stood and still stands on a clay bank on the roadside just east of our barn. It seems thrifty and bears fruit nearly every year. Huckleberry bushes in the swamp are usually from four to seven feet in height, sometimes, however, running up vine like through a spruce or tamarack to a height of ten or twelve feet. Coming from seed there are, of course, as many different sorts as there are of seedling apples and they vary in time of ripening from the last of June until the latter part of September. We often have GOOD PICKING for over two months steady. They vary in color from light blue to black. Frost while the plant is in bloom is one of the most frequent causes of failure, although insect enemies are often troublesome.

We have never attempted to transplant and cultivate them, as we have abundance naturally, but can see no reason why it cannot be successfully accomplished. I do not think they can be raised, however, on all soils. The plant belongs to the genus vaccinium and will grow only on peat bogs, alluvium, or modified drift.

The succession in a huckleberry swamp is, first, water; second, pondlilies; third, sphagnum; fourth, Cassandra; fifth, huckleberry, spruce and tamarack and the tamarack is followed by maple, birch and pine.

Of course it takes nature hundreds of years to convert a lake into a pine forest, but on this farm are large pine trees now, where the muck is twenty feet deep, which was undoubtedly the depth of the water sometime.

But to return to our subject. Crackleberries are found in the swamp along with huckleberries, are black, about the size of huckleberries and have hard seeds. Their season is much later, as they begin to ripen when huckleberries begin to wane. They are not much thought of where other fruit is abundant.

In conclusion I will say that I believe huckleberries can be transplanted and cultivated by observing the following rules. Select young plants. Transplant as soon as frost is well out of the ground. Plant in brown peat, black muck, muck and sand, or sand, clay and vegetable mold mixed, but never in heavy clay nor in clayey black ground, nor in springy black ground. Select a location protected from late spring frosts if possible. In moving the plants do not let the roots get dry, and select plants small enough so that you can get the fibrous roots. To our notion the swamp huckleberry is one of the best berries on earth.

*

A COVER CROP FOR THE ORCHARD.

Prof. L. R. Taft, Michigan Agricultural College.

[Extract from the paper, "Renovating Old Orchards," read at the winter meeting of the Wisconsin Horticultural Society.]

About the middle of August some winter cover crop should be sown. As droughts often prevail at that time it is sometimes difficult to secure a catch, but fairly good results can be secured with oats, sowing about two bushels per acre. They will make a growth of one to two feet, according to the character of the soil and the season, before they are killed by frost.

This and the other cover crops serve a useful purpose in the fall by taking the moisture from the soil and lessening the danger of a second growth and the swelling of the

fruit buds. During the winter they hold the snow and leaves and thus not only lessen the depth to which the ground freezes, but serve to prevent alternate freezing and thawing and the resulting injury to the trees. In the spring the winter-killed oats will act as a mulch and prevent the rapid drying out and baking of the soil. When the ground is bare it is necessary to work the ground early in the spring to prevent the loss of moisture, but if covered with a good mulch the plowing can be put off, if necessary, until the first of June. It is also possible, when oats have been used as a cover crop, to do away with plowing, as a spading or disk harrow will loosen the surface soil and work in the mulch to form humus.

Rye is also used to some extent as a cover crop, but unless plowed under early in the spring it will dry out the ground and increase the tendency to bake. If left until the heads have formed, as is the common practice, it will be practically impossible to plow the land if heavy, except turning it over in clods. It will be difficult to turn under the straw and it will decompose very slowly.

In some respects the clovers and other leguminous crops are desirable for this purpose, as they not only supply humus, but a considerable amount of nitrogen that they have power to take from the air. Crimson clover is often used, but it is difficult to secure a catch in August and it does not make much of a growth before winter, when it is liable to be winter-killed. When it survives the winter and is allowed to stand until in blossom it causes the loss of a large amount of moisture which is particularly desirable for the trees at this time. The same is in a general way true of red clover, and if either of these is to be used as a cover crop it should be sown as early as the middle of July.

Good results can also be secured with cow-peas by sowing them in drills two feet apart early in July and working them as long as possible. This crop is injured by the slight-

est frost and will succeed best in warm locations in the southern part of the state.

When the trees are making an average growth of more than one foot each year and the soil is naturally moist, fairly good results are often obtained if the land is seeded to red clover for two years, and Canada peas are often used in the same way. Hogs and sheep may be used to gather up the fallen fruit and destroy the insects that it contains. If care is taken that they have a sufficient amount of food they will not injure the bark.

TREATMENT AND CARE OF STRAWBERRY PLANTS THE SECOND YEAR.

H. E. McGregor, Appleton, Wis. [From the Second Prize Essay.]

If a strawberry plantation has had the right treatment from the first the second year should produce a larger crop than the first year, if managed rightly. As soon as the first crop of berries is gathered the work of getting the old bed in shape for the next crop should commence without delay. Our old exhausted plants must have new life and energy put into them for the next harvest.

The usual method is to narrow up the old bed to about six or eight inches and grow a new lot of young plants for the next year's crop. This plan will work all right in the Southern States, where the season is long enough to mature these young plants to the age when enough fruit crowns will form for a profitable crop.

For our shorter season we believe the better way is to depend upon the old plants and discard the young plants altogether. Having settled upon this course, we proceed as follows:

Mow off the old plants and rake the ground clean so

that we can use the plow, cultivator and harrow. Now with a steady team plow two furrows in each space between the rows, narrowing up each matted row to about 18 or 20 inches; then harrow down the ridge by going lengthwise until level and then crosswise until all is fine and nice. This harrowing should be thoroughly done, for upon its thoroughness depends the rapid growth and quick renewing of the plants.

If the old plants are too thick in the matted row they should be thinned until each plant will stand about six inches from its neighbor. This will give ample space for the enlargement and development of each plant by the end of the growing season.

Before final harrowing is the proper time to apply our fertilizer, either in the shape of well-rottcd manure or a good quality of vegetable fertilizer. If of the latter about one thousand pounds per acre will give good results.

Subsequent treatment is the same as the first year, except that all runners should be cut off every ten days not allowing one to take root. This method, with good care, in a favorable fall, will give a fine matted row of mature plants with plenty of fruit crowns for an abundant crop of berries the following season.

Managed in this way the old strawberry plants reserve for their own upbuilding the vitality and energy that would be expended in propagating a new lot of plants. This vitality saved to the old plants will give the necessary plant development for a good crop, with the added assurance of plenty of fruit crowns, which cannot be gotten from the longer route through new-grown plants, for lack of time for plant development in the short season from berry harvest to freezing-up time.

It is wonderful the amount of latent power and energy to reproduce itself that is still left in an old strawberry plant after fruiting. Given plenty of plant food, moisture,

good culture and favorable environment, it will get itself in good shape for another crop of berries in a few weeks. Scarcely resting for a moment from its labor of fruit-bearing it commences at once to renew its whole root system, sends out new foliage, widens and expands its parts from root to leaf, until, by the time it takes its winter sleep it is ready to produce another crop of berries the following season. A plant that can do so much in so short a time deserves the best of care. What that treatment should be calls for the best thought and ripe experience of our best horticulturists. We have learned much of its nature and needs in the past but we shall know more in the future if we are observant and studious.

WANTED-A CORELESS CRAB.

By Prof. E. S. Goff.

For some years past, the conviction has been gradually growing with me that we have been making a mistake in the past in neglecting the fruits that are abundantly hardy in our climate and, instead, attempting to make fruits grow here that are not and never can be at home with us. It is this sentiment that has prompted our somewhat extensive experiments with the native plum, that are now beginning to bear fruit, and the same thought has induced us to commence experiments with the wild black and red cherries, the dwarf Rocky Mountain cherry and the crab apples. Progress in this work will doubtless be slow, but this renders it all the more important that it should be begun at once.

The crab apple, as a fruit is, and probably always will be, chiefly valuable for preserves. For this purpose, its core and seeds are very much in the way. It is well-known that varieties of the common apple and of the pear have been grown that were both seedless and coreless. These

have not attracted much attention because the common apple and pear are too large to preserve whole, and since they must be cut, it is very little extra trouble to remove the core. But think what an acquisition a coreless crab would be. The preserved fruit could be eaten without the annoyance of a core or pit, and the fruit could be evaporated whole like prunes, and thus the evaporated product could be had much cheaper than our present evaporated apples.

There is every reason to believe that a coreless crab can be produced. A few years ago, I received cions of a crab from a gentleman of Pullman, Washington, who claimed that the fruit of the tree whence the cions came was both seedless and coreless. The cions were in poor condition when they reached me, and though I worked them carefully, none of them grew. A year or two afterward, I wrote for more cions, and received information that the tree as it became older bore fruits with normal cores and seeds. This information came from a reliable source, and is doubtless true. I mention it as evidence that a coreless crab is by no means an impossibility.

Our native crab is excellent for preserves, and a coreless variety of it would be more valuable than any of our present Siberian or hybrid crabs. A coreless crab is a possibility and we should be on the lookout for it. Those who have a taste for plant breeding will hasten the good time by growing seedlings from our present varieties that produce the fewest sceds, and the tenderest cores.

Experiment Station, Madison, Wis.

"Johnny," queried the teacher of the new pupil, "do you know your alphabet?" "Yes'm," answered Johnny. "Well, then," continued the teacher, "what letter comes after A?" "All the rest of 'em," was the triumphant reply.—Denver Times-Sun.

PREPARING FRUIT FOR EXHIBITION.

Those who contemplate sending fruit to the Pan-American Exposition at Buffalo this year, or who will make a display at fairs, etc., will be interested in the following advice from H. E. Van Deman. Speaking of the strawberry, he says if one expects to show this fruit to the best advantage, he should have the plants in the best condition, not too thick in a row, and in rich soil. Then it is necessary to pinch off some of the blossoms, if the variety is one which is given to heavy bearing.

With the bush fruits the same principles hold good. The canes should be well pruned back so as not to have too large a bearing surface, and cultivated from late springtime until the fruit has ripened. If the bushes are well mulched along the row, it is so much the better, for mulching aids greatly in retaining the moisture in the soil, and this we all know is very essential to the proper development of berries.

Grapes are no exception in regard to proper treatment to secure good fruit. The vines should be closely clipped and all but one or two of the largest clusters should be clipped off each bearing shoot. These should be bagged before there is any danger of rot affecting berries. If good cultivation follows, there will rarely be any difficulty in having good exhibition grapes.

These tender fruits, especially the strawberries, may be safely transported hundreds of miles by using proper methods of packing. My plan is to wrap each berry or cluster of grapes, in paraffined tissue paper, and then pack them between thin layers of cotton batting. The paraffined paper keeps the moisture in the fruit better than that which is not so treated, and also prevents the juice of any bruised or decayed specimens from damaging others.—Western Fruit-Grower.

KILL THE ENGLISH SPARROW.

Much has been said in the columns of the The Warbler against the English Sparrow, but among the numerous sins justly charged against him, the worst one of all has hardly been mentioned; this we judge for the very good reason that but very few people have had occasion to notice it. We all see him when with bluster and outcry he attacks our native birds, and appropriates to himself their nesting places, but we do not often see him when he finds and slyly approaches their nests and either kicks the eggs out or pecks holes in them.

I have made this part of his character a special study for two years and can say from personal observation that the English Sparrow breaks up by destroying the eggs more than half of the nests of native birds that are made in Floral Park. This is true also in other places where the pest has become numerous. To what extent he carries his depredations to fields and forests I cannot say, but among the birds that breed near the habitations of man, the English Sparrow is doing far more to exterminate them than all other forces combined. Our only hope for saving our beautiful, cherished and familiar songsters is by killing these sparrows. This should be done by every possible means, fair or foul.

JOHN LEWIS CHILDS in The Mayflower.

THANKFUL.

"I don't see what makes people go to football games on Thanksgiving day," remarked his wife. "It hasn't anything to do with the spirit of the occasion." "Oh, yes, it has," was the reply. "I never went to a football game in my life that I didn't feel tremendously thankful that I wasn't one of the players."—National Rural.

THE MELON LOUSE.

Prevention of this insect enemy is better than cure. Two methods have been suggested looking toward the prevention of loss. One consists in thoroughly cleaning up and plowing the old melon fields between the seasons, if melons are to be planted on the same land next year. This serves to destroy many of the insects which pass the winter in the trash and litter of the old melon field.

Perhaps a better method is to change the crop on the old field and grow melons in a new place.

The lice may be held in check by the use of tobacco water. In applying the tobacco infusion, the operator must take pains to cover the lower surface of the leaves. This cannot be done by the ordinary spraying method, but requires special effort.

MELON BLIGHT.

This disease attacks cucumber vines as well as the vines of the muskmelon. It begins on the top of the leaves, giving them the appearance of having been frost-bitten. Later it extends to the stems and the vines are soon all dead.

In answer to an inquiry regarding its cause and prevention the Rural New-Yorker says: This Melon leaf-blight is getting to be a serious matter. Practically all the melons in northern New Jersey were badly injured or destroyed by this subtle disease last year. Most of the growers attribute it to atmospheric and temperature changes, and it cannot be denied that hot, moist weather, interspersed with sudden cool showers, favors the rapid spread of the trouble, but the general appearance of the dying foliage impresses one with the idea that it is really of bacterial origin. Our vegetable pathologists have thrown very little light on this troublesome and widespread affection; at least no specially

useful information concerning it has come to us. It is evident that until some way of controlling or avoiding the blight is developed, it will be well to confine our planting to quick-growing and early-maturing varieties, as the disease is plainly more destructive to the later kinds.

MELON BLIGHT AND SODA BORDEAUX.

A later number of the Rural New-Yorker gives suggestions as to the treatment of this blight. The questions are from a melon-grower in Michigan. The answer is by Prof. Craig.

I shall try the Bordeaux mixture this season and hope it will prove effectual, though it seems to me there is one serious objection to its use. If used late after the melons are nearly grown, will not the lime form a white coating on the melons and make them unsalable? As I understand it lime is used simply to neutralize the acid in the sulphate of copper. If so, is there not some other alkali that will do this without the objectionable white color? How would sal soda do? How should it be used?

Ans.—We have used what is known as soda-Bordeaux on potatoes. In this soda lye takes the place of most of the lime. The proportions are three pounds of sulphate of copper, one pound can of Lewis lye, five ounces of lime and 30 gallons of water. The copper is dissolved the same as in making the ordinary Bordeaux, and diluted so as to make 15 gallons. The can of lye is dissolved in two gallons of water and then diluted to five gallons. The lime is slaked in hot water and diluted to five gallons, after straining through a coarse cloth. The 15 gallons of copper, the five gallons of lime and the five gallons of soda are then mixed with water enough added to make 30 gallons. In our experience this has given as good results as the lime Bordeaux. It sprays easier, does not scald as badly, but does not stick

to the vines as well. Mr. F. A. Sirrine, who gave the information to Holmes Bros., says:

"We have always prepared Bordeaux mixture for pickle and melon spraying with the yellow prussiate of potash test, and in this way have never had an excess of lime to discolor the fruit. In fact, where the vines are vigorous, only a small portion of the mixture strikes the fruit, and there is no danger of scalding the fruit with the mixture. Of course some of the mixture may show on the fruit, and when a man is growing for market purposes he should avoid anything that will excite suspicion in the appearances of his melons. Although I have not tested the soda-Bordeaux mixture I think it would be well to advise the use of the ordinary Bordeaux mixture until the melons become so large that the leaves do not protect them, after which he can use the soda-Bordeaux mixture."

MULCHING MELONS.

No better or sweeter melons or cantaloupes are grown than we have every year. I first plow the ground, plant the seed and generally cultivate it until the melon plants begin to start their vines. Then I mulch so heavily that no annual weeds can come through. The soil remains moist throughout the season.

Sometimes I grow pumpkins the same way, and the results are simply wonderful. In 1897 I grew seven pumpkins on one vine in mulched ground that averaged over 50 pounds each, and they were of the choicest variety. The way to prove this plan is to try it. After over thirty years' experience in mulching melons, potatoes, tomatoes and other crops, too, I like it exceedingly well. But the coating must be put on so thoroughly as to cover all of the surface so deeply that no weeds can grow, and that the soil will be moist during the driest weather.—O. J. Farmer.

TO KILL CABBAGE WORMS.

The cabbage worms bothered us badly during July but we soon got rid of them by using a mixture of equal parts of air-slaked lime, salt and wood ashes. This was sifted through a meal sieve and well mixed. Dust the mixture over and into the plants and it will be good-by worms. It seems to kill them quicker if it rains soon after it is put on.—Exchange.

TROUBLE WITH SQUASH VINES.

The fungous disease of the vines may be combated successfully with Bordeaux mixture. A correspondent of the Rural New-Yorker says: Although the disease had made considerable progress before I began spraying, the treatment saved all hills that had not already been practically destroyed before the first application of Bordeaux. This year I sprayed my vines—Hubbard squash—with Bordeaux as soon as they were up and every few days thereafter till the vines had a strong start. The result is the most vigorous field of squash vines I have ever seen. Where a part of the vine is already destroyed, cover with earth a foot or two of each vine where it is healthy; new rootlets will start out and help to save the parts not yet destroyed.

FOR THE HOUSEHOLD.

HOUSEHOLD HINTS.

Camphor will remove white spots from hard or stained wood, made by a flower pot, vase or water. Rub well with spirits of camphor and then polish with oil.

Willow furniture can be cleaned by rubbing it briskly with a coarse brush dipped into salt and water. Then dry thoroughly.

Soiled matting can be cleaned by wiping it with salt and water, which makes it look almost as good as new.

RASPBERRY TRIFLE.

Bake a sponge cake in a square or oblong pan. This may be made on Saturday. With a sharp knife cut almost to the bottom, take out the center, leaving only an inch rim all around. Fill, just before serving, with choice red raspberries, sugared, and cover the whole with whipped cream. Strawberries may be used instead of raspberries.

CHERRY SHERBET.

A pint of sugar, one quart of water, juice of one lemon and one pint of cherry juice. Boil the water and sugar for five minutes; when cold add the cherry juice and juice of the lemon. Freeze same as ice-cream, stirring continuously. In the meantime have the white of one egg beaten with a tablespoonful of fine white sugar until so stiff it can be cut. When the sherbet is frozen remove the dasher, stir the stiff egg in lightly, repack until time to serve. Serve in sherbet glasses.

CHERRY PUDDING.

Make a cake batter, using butter the size of an egg, half a cup of sugar, a cup of sweet milk, two eggs, a little salt, two cups (rounding full) of flour, two teaspoonfuls of baking powder. Stir into this a pint of stoned cherries, first draining the juice from the cherries and flouring them well. Put into a buttered granite ware dish and steam two hours, taking care that the water under the steamer does not stop boiling for an instant. Serve hot with a liquid sauce made with a cup of water, $\frac{3}{4}$ cup of sugar and the juice which drained from the cherries after they were stoned. Let come to a boil and thicken slightly with a little cornstarch or flour stirred smooth in cold water. Add a pinch of salt and, in case the cherry juice does not make it sufficiently tart, add lemon juice.

25

WHITE HOUSE JAM.

The following is the receipt used at the "White House" for red raspberry jam: To five pounds of red raspberries (not overripe), add an equal weight of the finest quality of white sugar. Mash, crushing each berry; put in a preserving kettle; add a quart of currant juice, and cook slowly until a little dropped on a cold plate jellies. Store in a dry, dark and cool place.

MOVEMENT OF THE SOIL IN THE SUCCESSFUL VINEYARD.

C. W. Sampson of Eureka, Minn., in the Minnesota Horticulturist recommends the following method of caring for a vineyard:

"In the first place, in laying out and planting a vineyard the soil should be thoroughly prepared. It should be plowed very deep and, if possible, subsoiled, stirring the ground for a depth of sixteen inches. It is a good plan before planting to use an Acme harrow, which will thoroughly pulverize the surface and settle it so as to resist the drouth. After the young vines are set the soil should be kept thoroughly cultivated during the early summer up to about August 1st. After that time only the surface soil should be stirred very lightly, only enough to keep the weeds in check. Every fall it is a good plan to use a onehorse plow and plow up the entire surface between the rows, throwing the dirt towards the vines and leaving a dead furrow in the middle. This leaves the soil perfectly loose, and it will not freeze so deep as it otherwise would. It also leaves the soil in good condition for cultivating the next spring. Care should be taken to run plow shallow so as not to cut any roots."

The man with a home and family who is happy and contented is richer than the greatest financial king in the land.

LEAVE ON THE LEAVES.

I am convinced that the plan of removing a lot of leaves from trees or grapevines, to admit sun to the fruit and presumably hasten ripening, is a most pernicious one. Leaves are the nourishing organs, the lungs of trees, and to remove them is a detriment to fruit development. More than that, any branches stripped of leaves this year will have weak, ill-formed buds next year, which means feeble growth.— Vick's Magazine.

VARIETIES OF GRAPES BEST ADAPTED TO MINNESOTA.

J. W. Murray, Excelsior, in Minnesota Horticulturist.

If I were raising but one grape for profit, I would raise no other but the Delaware. Next, in the line of red grapes, is the Brighton. That is one of the finest grapes grown in the Northwest. Next is the Iona. I am located in one of the most favorable grape regions in the Northwest, on the south shore of Lake Minnetonka. It will ripen there in most situations. The Rogers No. 15 is a very fine grape, subject to the objection that after four or five years it will mildew. Now to get to the black grapes. The Concord stands at the head so far as grapes raised to sell are concerned. My experience is, and it is borne out by the testimony of some of the most prominent commission men, that the only grapes that it will pay to grow to sell are the Concord and the Delaware. They will not pay as much for any other kind of grape as they will for the Concord and Delaware.

Then there is the Janesville. Where you must have a hardy grape or none, it is valuable. Where you can raise the Delaware or Concord it is not worth ground room. Moore's Early would be the king of grapes if it bore as heavily and the vines were as reliable as the Concord, because it is considerably earlier. Black grapes are the same

to most people. With me the Moore's Early proved such a poor bearer that I finally dug them all out except a dozen for my own use. It is a poor bearer, and it is very hard to get a good vine because the spurs will kill out in the winter time. I dug them all out. The Cottage grape is a fine, good grower, the grape is very sweet; but after mentioning those qualities the list is exhausted, and it is hardly worth ground room. The Lady and the Martha are two white grapes, and we have found that they do not do very well with us. They are tardy bearers and light bearers, and all such things are useless to raise for profit. I could make twice as much from some other varieties. Then there is the Prentiss. I used to look through the grape books and wish I could produce such grapevines as were produced in the books. In the Prentiss you have just such a vine as you see in the books. It branches very beautifully, too much in fact; it is a very fine vine, very hardy-a white grape and pulpy and solid. I often wondered how so many grapes could be packed on a stem. It has a rather peculiar growth, and on the whole it is hardly worth raising.

Of the new grapes, Campbell's Early is an eastern grape of the black variety, of which I do not know enough to speak intelligently.

Speaking of the Niagara grape, Mr. Murray says it will hardly ripen in his locality. He does not recommend the Niagara for eating or market, but it is a peerless grape for cooking and canning. Give your neighbors enough to put up a pint can and they will want more. It is so different from other grapes when canned, that it gives the impression of being another fruit. It will not pay to attempt to grow it for any other purpose than canning, in the Northwest, because it will not ripen; but for canning it can be used when not fully ripe.

28

WAUKESHA LEADS; WHO WILL FOLLOW?

Early in the spring J. C. Walker, of Waukesha, manager of the Fountain house, offered several fine prizes to non-professional gardeners who would enter the contest to beautify the city, its parks and grounds. At the same time C. H. Osborn offered a valuable prize for the most beautiful garden and lawn. A meeting is to be called by those interested in the beautifying of the city, for the purpose of arranging the classes and designating the prizes to be given to those who do not enter the general contest. The movement has proven a popular one and there has been a general cleaning up of lawns, gardens and rubbish yards.

MEETING OF THE EXECUTIVE COMMITTEE.

EXHIBIT AT PAN-AMERICAN EXPOSITION.

At a meeting of the Executive Committee, held at Madison Tuesday, May 28th, it was definitely settled that the Wisconsin State Horticultural Society make an exhibit of apples at the Pan-American Exposition which is being held at Buffalo, N. Y. Having received an appropriation of \$500 in addition to our annual appropriation from the state and being assured \$500 from the State Commission, the Society is now in a position to make a creditable showing of fruits in their season. It was decided to have someone be on the grounds during the exhibit to install the display and one here in the state who will have the collecting of the fruit. S. H. Marshall will tend to the collecting of fruit and no doubt the members of the Society will hear from him at the proper time. The member who will have charge and install the display will be appointed later.

SUMMER MEETING.

It was decided to hold the Summer Meeting, at Madi-

son, about Aug. 20th, during plum season. Liberal premiums will be offered on plums, late cherries, vegetables and possibly early apples. A two days' session will be held. One day will be devoted to the discussion of papers and the other to a visit to the Wisconsin Experiment Station to especially inspect the seedling plums as well as other things of interest at the station. Mr. Marshall has something good in store, also, for this day and we will all hear from this later. All members should begin to make arrangements to attend this Summer Meeting. Watch for program and premium list which will appear in due season.

J. L. HERBST, Secy.

OUR NEW TRIAL ORCHARD.

L. G. Kellogg, Ripon.

To the Wisconsin Horticulturist:—In company with Mr. Herbst we have been at Eagle River and planted a Trial Orchard upon the farm of Senator D. E. Riordan, the site selected by our president, Dr. T. E. Loope.

The location, no doubt, is as good as could be secured in the vicinity of Eagle River, as most of the lands were originally covered with heavy pine and hemlock timber and inclined to be somewhat light and sandy. However, there is clay enough in the soil to produce most excellent crops of grass and corn. We planted 165 apple trees, mainly of the Wisconsin standard varieties, 30 native plum and 30 cherry.

This orchard is designed and planted for the protection of the settlers of this part of the state and in a few years will demonstrate which varieties are hardy, productive and safe to plant.

Teacher: "You have named all domestic animals save one. It has bristly hair, it hates a bath and is fond of mud. Well, Tom?" Tom (shamefacedly): "That's me."—Gaiety.

WISCONSIN TRIAL ORCHARD AT WAUSAU.

J. L. Herbst, Sec'y State Horticultural Society.

A careful inspection of the Trial Orchard at Wausau, made by L. G. Kellogg and myself, found it in the best of condition. Only one tree, a Windsor, was found dead and this evidently had been killed by the wire of its label choking it.

The new grafts that were put in last year had made a splendid growth. In our judgment 75 per cent of the grafts put in a year ago have grown. We put in a good many more cions on our visit and expect these all to grow as the cions were in the best of condition and trees were in good shape to work. Each tree was gone over and carefully trimmed. Quite a number of varieties had fruit buds on and should have fruit this year. Plums and cherries were well set with fruit buds and have made a remarkable growth the past year. Quite a number of these will produce some fruit this season. The cover crop of oats and vetch that was put on the ground last season held the snow so that the ground was well covered all winter. This will be plowed under and orchard given clean cultivation until time for cover crop.

There is still left room for a few more trees to be planted and if there are any more varieties that any one wishes to be tested at Wausau, if he will kindly advise me, shall be glad to reserve place for them.

FROM THE REPORT OF STATE BOARD OF AGRICULTURE, JUNE 1, 1901.

Reports from correspondents throughout the state, June lst, show the season, in development of crops, to be two weeks later than usual. Prevailing winds have been easterly, and in most sections of the state more or less damage was done by frost the last week in May. The present out-

look for corn is anything but propitious. Planting was later than usual, and fields that were planted early have suffered from the cold weather and frosts, the plants looking yellow and sickly and having little, if any, advantage over that planted later. It is feared that our hay crop will be less than an average one and farmers will do well to arrange for supplementary forage crops.

Stock was generally turned upon pasture before grass had made any strong growth, and subsequent conditions have not allowed the grass to make much gain upon heavily stocked pastures, and they are almost universally reported as "poor" or "fair," where in June they should be "good" and "very good." The live stock and dairy interests of the state are menaced by the unpromising condition of its grass crops. The prices of butchers' stock in local markets, already high, will doubtless be sustained.

This is to be an "off-year" with apples in Wisconsin. Trees did not blossom heavily, and the crop will be light, though doubtless of good quality, as trees seem to be in healthful condition. Plums and cherries promise a full crop Grapes and small fruits have been somewhat injured by frosts, but their show is fairly good. Strawberries blossomed very heavily, and though they were somewhat injured by frost, will still be an average crop.

JOHN M. TRUE, Secretary.

THE FRUIT OUTLOOK.

Reported for the Wisconsin Horticulturist.

Sparta—Thus far we have escaped with but little damage by frosts. Plenty of moisture at present writing. Goodly number of new settings of strawberries badly effected by drought at time of setting. Will have to be reset. Strawberry roots were injured the past winter and cannot mature all fruit set properly. In my opinion strawberries in this

section will not yield or be as good quality as last year. Most cane berries came through the winter in good condition. I predict good prices for good quality fruit placed upon the market in attractive shape. Less acreage will be set this year than was planted last year.—J. L. HERBST.

Evansville—Replying to your card will say that the damage to strawberries and other fruits was very slight and, if I am to judge by the garden, the strawberry crop will be fine. But plums and cherries not half a crop. Currants and gooseberries only fair. Apples will be light crop. Mercury today reached 40 degrees with cold northwest winds.—B. S. HOXIE.

Omro—In reply to your inquiry will say that the May frosts have done a great injury to currants, gooseberries, grapes and plums; cherries and apples very slight. Foliage is looking fine on the trees and they are making rapid growth.—MRS. Jos. D. TRELEVEN.

North Greenfield—May frosts in this vicinity were very slight, scarcely leaving an impress on vegetation of any kind. I think strawberries were not materially injured; I know that ours were not. Our plants wintered the best that I ever saw. We are now feasting on our Michel's Early. I wish youwere here to help, as I am afraid we will have to market some of them and do not want to spend the time unless the price is better than it is sometimes. There are but few strawberries raised in our immediate vicinity at present. I have just been looking at our Gandys. I see no effects of frost upon them; they are just passing out of the blossom stage.—A. M. JOHNSON.

[The above contained a cross-section and a side-section of a ripe Michel's Early, the cross-section measuring $1\frac{1}{2}$ inches, and the side-section $1\frac{1}{4}$.]

The fruit prospect in Kent county, Mich., at this writing (May 20th) is very good. The cool damp weather of May has kept the buds back so that they escaped from the

frosts fairly well. Cherries, plums, pears, peaches and apples have blossomed freely and the young fruits are just shedding the blossom sheath. Insect enemies have not showed up yet but probably will in a few days. Huckle-berries are all right so far and cranberry vines have not started yet.—WESLEY JOHNSON.

Fond du Lac—May 26th we had a white frost which did considerable damage. Strawberries were in full bloom and a good many of the blossoms were killed. Grapes were all killed and currants and gooseberries were cut on the tops of the bushes. We had just set out 2000 tomato plants and now have the job to do over again. "The early bird catches the worm" but there is such a thing as being too early. Raspberries are all in good condition except Marlboro which were killed within a foot of the ground. Columbian killed back a good deal but will bear quite a crop for all that as they have a habit of throwing fruit spurs from near the ground. The Older is our best blackcap.—L. A. CARPEN-TER.

Racine—We have had four heavy frosts in the past three weeks and strange to write not an iota of damage, not even a bean or potato leaf touched although ice formed twice. The berry crop will be immense if we have rain enough. The acreage is light; bloom is altogether too profuse. My patches are white as a field of buckwheat yet and there are some ripe berries. The planting of berries light this year as everyone is cabbage crazy. More than 1500 lbs. of cabbage seed were sown here this spring. This postal got delayed so that I write you heavy frost this morning. Ripe strawberries and frost together.—B. R. BONES.

Appleton—Frost injury not serious here. Strawberries 34 crop; red raspberries badly winter killed, except Loudon. Currants ½ crop; gooseberries full crop; apples will be light crop; not many plums raised here; cherries full crop. Light frost on morning of June 7.—C. A. ABBOTT.

Elroy—Damage to fruit by frost practically nothing in our immediate locality. Strawberries damaged some on low ground; will be light crop. Blackberries promise very well.—STUART MUTCH.

THE COLOR SCHEME OF THE PAN-AMERICAN.

By far the best article we have seen on the Pan-American Exposition appears in the July number of the Delineator. It is written by N. Hudson Moore and depicts especially the beautiful color-scheme of the Exposition buildings. The article is embellished by numerous fine illustrations, several of which are printed in colors. The plates were made directly from the original water-color sketches of C. G. Turner, Exposition Director of Color. These pictures are marvelous examples of the high standard to which the art of printing has attained. So closely do they resemble water-color paintings that it is difficult to believe they are printed. The printing was done by the Delineator presses, running at high speed. In the Electric Tower sea-green is the dominant color, mingled with ivory and gold. "The Horticultural Building is splendid with orange, its minor details showing blue, green, gold and rose. The Music Hall is rich in red." We understand that an edition of 625,-000 of the July Delineator was printed. We opine this will soon be exhausted, so great will be the demand for this Pan-American sketch.

EDITOR'S NOTES.

Bear in mind that the "June meeting" is to be in August this year, and is to include a visit to the Experiment Station in Madison.

M. F. Foley of Baraboo is at the Pan-American Expo-

sition this week. Doubtless he will take in the Nurserymen's Convention at Niagara Falls.

Mr. and Mrs. Irving C. Smith are the joyful parents of a little son.

Is our vice president, F. C. Edwards, getting ready to "pull wool over people's eyes?" The papers say he has bought an 1800-acre sheep ranch in the northern part of the state.

Franklin Johnson has been exceedingly stiff-necked for a month past and rigidly upright in his walk,—all because of a hydra-headed carbuncle on his neck.

B. S. Hoxie's beautiful and valuable paper on "Gardens," read at Oshkosh last winter, has been secured for publication in "American Homes," of Knoxville, Tenn.

THE

Wisconsin Horticulturist for 1901. THIS PAPER and the WEEKLY WISCONSIN For Only Fifty Cents.

We have perfected clubbing arrangements whereby we can now offer both the Wisconsin Horticulturist and the Weekly Wisconsin for the low price of 50 cts. a year. This is a very liberal offer and should be taken advantage of by a large number of our readers.

The Weekly Wisconsin is a family newspaper unexcelled in reputation. Particular attention is devoted to the local news of Wisconsin and the northwest. It's woman's page of matter every week is worth the cost of the paper.

Do not delay, but subscribe at once, and secure both papers for the very low price, to-wit: 50 cents. Address,

The Wisconsin Horticulturist, Baraboo, Wis.

Vredenburg & Company,

Printers, Lithographers, Engravers, Binders, Rochester, A. D.

FOR Nurserymen, Florists and Seedsmen.

NURSERY Catalogues, Price-Lists, Stock Forms, Etc.

Send for Price-List of Supplies.

Seed Packets and Catalogues.

Lithograph, Hand-Made, Photograph and New Process Fruit and Flower Plates.

SAVE 10 to 25 per cent. by placing your orders for Envelopes with us.

Colored Fruits and Flowers

FOR Catalogues, Plate Books, Circulars, Cards.

VREDENBURG & COMPANY, ROCHESTER, N. Y.

Note—Frontispiece of May issue of this Journal illustrates our "NEW PROCESS" plates.

